

**Safety and Health Plan
for
891 Trailer Removal Project**

September 1997

Prepared by:
Denver West Remediation and Construction, L.L.C.
1819 Denver West Drive, Building 26, Suite 200
Golden, CO 80401

Safety and Health Plan
for
891 Trailer Removal Project
Rocky Flats Environmental Technology Site

Approved by:

J.G. Dungeon 9/22/97
DWRC Construction Manager

Ricky J. Carr 9/23/97
DWRC Safety and Health Manager

M. J. Allen 9-22-97
RMRS Project Manager Concurrence

[Signature] Sept 22 1997
RMRS Safety Concurrence

**Safety and Health Plan
for
891 Trailer Removal Project**

This is a
CONTROLLED DOCUMENT (4)
ROCKY FLATS ENVIRONMENTAL
TECHNOLOGY SITE
ENVIRONMENTAL MANAGEMENT DEPARTMENT
NO RED Stamp
COPY # 35

1.0 Introduction

This Safety and Health Plan (SHP) describes the safety and health requirements for the 891 Trailer Removal Project at the Rocky Flats Environmental Technology Site (RFETS) to be performed by Denver West Remediation and Construction, L.L.C. (DWRC). The project consists of relocation of trailers T891A, T891L, T891M, and T891N, connecting propane piping to a propane tank and a steam cleaner, and removing an electrical distribution panel. Activities to be performed in support of this effort include utility (water, sewer) isolation, pipefitting, removal of metal skirts, porches, steps, framing and bracing and transport of trailers to other locations at the RFETS.

The requirements of this Safety and Health Plan (and all referenced documents) is applicable to all DWRC employees, DWRC subcontractor personnel, and visitors (RFETS employees) who enter work areas controlled by DWRC in support of this project.

2.0 Project Organization and Responsibilities

The Construction Manager is responsible for all aspects of the 891 Trailer Removal Project including compliance with all safety and health requirements. The Construction Manager shall ensure that all project personnel comply with the rules and requirements regarding safety and health as specified in this Safety and Health Plan.

The Safety and Health Manager and safety professionals shall provide technical assistance to the Construction Manager and superintendents regarding safety and health issues and shall verify compliance with safety and health rules and requirements by performing periodic inspections of the project work site. The Safety and Health professional shall maintain records of all safety and health related activities such as training, accident investigations, and project work site inspections and any necessary corrective actions. A Safety and Health professional will be present on the RFETS during the performance of all construction work, and will be at the construction work area during pre-evolution briefings, review of Activity Hazard Analyses (AHAs), the initiation of new activities, safety and health orientations, and other safety related activities as specified in the AHAs.

3.0 Orientation and Training

3.1 Pre-Construction Safety and Health Orientation

All project personnel (DWRC and subcontractor personnel) shall attend a pre-construction safety and health orientation prior to commencing work on the project. This orientation will be conducted by the Construction Manager (or designee) assisted by the Safety and Health professional. The topics to be covered during this orientation include, but are not limited to, the following:

- Employee rights and responsibilities with respect to safety and health.
- Subcontractor responsibilities.
- Location of 891 Trailer Removal Project Safety and Health plan. A copy of this plan will be maintained at the work site for review by project personnel at any time.
- First aid and medical facilities: The Occupational Health clinic is located in Building 122, and the site fire department has trained EMTs that can respond during off normal hours. Call x2911 to activate the emergency response system at the site.
- Specific Safety and Health programs and procedures applicable to this project.
- Hazard Communication program.
- Employee access to exposure monitoring data and medical records.
- General project hazards and controls: This information will be addressed in the Activity Hazard Analyses (AHAs).
- Hazard recognition and reporting: All project personnel are responsible for identifying unsafe conditions and either correcting them or reporting the condition to their supervisor or a Safety and Health professional.
- Accident reporting procedure: The Safety and Health Manager, Construction Manager, and Safety and Health professional shall be notified of any accident or "near-miss" resulting in injury, illness, or property damage as soon as practical following the incident.
- Fire prevention and control.
- Personal Protective equipment (PPE): PPE shall be used as specified in the AHAs. Hard hats, safety glasses, and safety shoes shall be required at all times within the construction work area.
- Alcohol and drug abuse policy.
- Disciplinary procedures: All project personnel shall be subject to disciplinary action, including removal from the project for failing to comply with any safety and health requirements applicable to the project.

3.2 Safety Meetings

Safety meetings will be held at least weekly for all construction site personnel. These safety meetings will address the construction activities performed or to be performed, hazard recognition, hazards associated with construction activities, control measures, lessons learned, or other suitable and appropriate topics. Activity Hazard Analysis (AHAs) will be addressed during these safety meetings. The topics discussed and the personnel in attendance shall be documented and records maintained at the work site.

3.3 Lead Awareness Training

All personnel involved with construction activities that may cause exposure to airborne lead shall be trained in accordance with the requirements of 29 CFR 1926.62.

3.4 OSHA required Training

All personnel will receive any OSHA required training in accordance with the applicable requirements commensurate with the activity being performed (i.e. forklift operations). Site superintendents shall have completed the OSHA 30 hour Construction Outreach training program or equivalent.

4.0 Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) shall be worn as specified in the AHAs. At a minimum, hard hat, safety glasses with side shields, and safety shoes shall be worn within the project construction area. Orange vests shall be worn whenever in proximity to heavy equipment. Work gloves should be used whenever handling debris or other similar materials.

5.0 Exposure Monitoring

An exposure assessment for lead shall be conducted in accordance with 29 CFR 1926.62 whenever construction activities disturbing lead may result in airborne exposures to lead (it is not anticipated that any activities will result in airborne exposures to lead) or activities identified in 29 CFR 1926.62 requiring monitoring are performed.

6.0 Medical Surveillance

Workers exposed to lead in excess of the action limit for lead in accordance with 29 CFR 1926.62 will be included in a medical surveillance program. Specific medical surveillance requirements are addressed in 29 CFR 1926.62.

7.0 Hazard Analysis

7.1 Preliminary Hazard Analysis

The anticipated construction phases of the 891 Trailer Removal Project are the removal of materials from the trailers, making the trailers roadworthy, and connecting piping. Specific hazards and control measures will be documented in the AHA for each specific activity (see section 7.2).

7.2 Activity Hazard Analysis

An Activity Hazard Analysis (AHA) will be performed for each major activity comprising the work scope. The AHA will describe the principle steps to complete the activity, the hazards associated with each step, and the controls to be implemented to minimize risk to project personnel. AHAs will be developed for the following activities:

- Utility Isolation and removal;
- Removal and loading of miscellaneous materials (i.e. debris, skirting, steps);
- Connecting propane piping to propane tank and steam cleaner;
- Making the trailers roadworthy and transport of trailers.

7.3 Daily Jobsite Hazards/Deficiencies Inspection

Daily safety and health inspections shall be conducted of the worksite, with safety and health deficiencies found and corrective actions taken, recorded in a permanent logbook.

7.4 Weekly Formal Jobsite Safety and Health Inspections

Weekly formal safety and health inspections of the worksite shall be conducted and documented. A checklist, or other equivalent means, shall be used to document these weekly inspections.

7.5 Construction Site Specific Hazards

Construction site specific hazards for the 891 Trailer Removal Project include:

- Falls from heights;
- Slips, trips, and falls;
- Falling objects;
- Material handling;
- Electrical;
- Hand and power tools;
- Heavy equipment operation;
- Pressure systems;
- Excavations;
- Animal/insects.

Construction site specific hazards will be identified in the AHA for each specific activity along with the control measures to be implemented to minimize the risk of injury to personnel.

7.6 Accident/Incident Investigations Lessons Learned

All accidents/incidents shall be investigated so that their causes and means for preventing reoccurrence are identified. Lessons learned from these accidents/incidents shall be documented and project workers shall receive training on lessons learned.

8.0 General Safety Requirements

This project will be performed in accordance with the applicable OSHA requirements, DOE Orders (DOE 440.1, Worker Protection Management), and applicable RFETS Health and Safety Practices Manual (HSPs) including HSP 24.01. The work activities will also be performed in accordance with the General Requirements described in Section 01700 of the Construction specifications.

In addition, all work will be performed in accordance with the DWRC Safety and Health Program plan and DWRC Safety and Health Guidelines.

Fire protection shall be performed in accordance with the RFETS Health and Safety Practices Manual and DWRC Safety and Health Guidelines. Portable fire extinguishers will be available at the construction work areas in accordance with 29 CFR 1926.150.

Lockout/tagout of equipment and utilities shall be performed in accordance with RFETS Health and Safety Practices Manual.

9.0 Control of Construction Site Access

Access to the construction sites will be controlled and restricted to personnel necessary for the performance of the construction activity. The areas will be delineated with barricade tape or other suitable means and marked with warning signs to alert personnel that they are entering a construction area and the minimum PPE to be worn when entering the area.

10.0 Construction Project Bulletin Board

A Construction Project Bulletin Board shall be maintained at the construction site (891 trailer complex). The DOE Occupational Safety and Health poster and emergency contacts shall be posted on the bulletin board.

11.0 Sanitation

Portable toilets will be available at the project work areas where toilet facilities are not readily accessible. Potable drinking water will be maintained at the construction areas.

12.0 Emergency Response

Call x2911 to obtain emergency response services. The Safety and Health Manager, Construction Manager, and Safety and Health professional shall be notified of any accident resulting in injury, illness, or property damage as soon as practical following the incident.

13.0 Spill Control

Spill control measures are not required for this project due to that hazardous chemicals/materials will not be used.

14.0 Recordkeeping

Documentation of safety orientation and training shall be maintained at the work site. Records of any accidents, injuries or illnesses shall be maintained in accordance with site and OSHA requirements. Records of safety inspections and any required corrective actions shall be maintained at the work site. Records will be maintained of safety inspections and any necessary corrective actions.

15.0 Post-Construction Activities

A final report detailing safety and health performance during the project will be submitted to the CTR following completion of the project. The report will include the following:

- Daily safety and health log
- Copies of safety meeting rosters and outlines
- Health and safety training records
- OSHA 200 log for project
- Final Injury and Illness Statistics report